at times being required to differentiate the one from the other. It is not difficult to understand how the unstable embryonic tissue of the angioma may at times develop a malignant growth, just as the pigmented mole reproduces its type of tissue in the pigmented carcinoma.

I have excised from the scalp of a woman, aged forty years, and a ten-year-old girl, small, brownish-red growths larger than a good-sized pea. The small tumors were almost exactly alike.

No recurrence took place as far as I have been able to determine. Under the microscope these growths were almost identical, being made up of newly developed connective tissue surrounding dilated and recently developed vessels. It would be impossible, pathologically, to distinguish the sections in these cases from those of a generalized angiosarcoma of Kaposi.

The localized variety of angiosarcoma is illustrated in the photomicrographs (Figs. 4 and 5) which were made from sections of a small warty growth from the abdomen, removed from a twelve-year-old boy.

There was considerable epithelial hypertrophy which gave the warty character to the growth. The history given by the mother of the boy was that a wart had been present for some time, but lately had been rapidly growing.

In portions of the tumor just beneath the epidermis the tissue closely resembled a benign angioma, the chief part of the growth, however, was a typical angiosarcoma in which the perivascular connective tissue cells showed numerous mitoses and were readily and brilliantly stained with the ordinary nuclear dyes. After the growth was removed the patient failed to return to the clinic, so that I am ignorant of the further course of the growth.

A COMPARATIVE STUDY OF DIGITALIS AND ITS DERIVATIVES.

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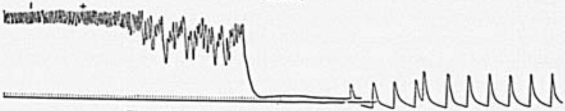
I. Digitalinum Germanicum and Digitoxin.

INTRODUCTION. The conflicting results obtained by investigators of the derivatives of digitalis, the differences of opinion which exist among clinicians as to their therapeutic value, and the importance of determining whether any of them represent the activity of digitalis, have led the writers to undertake this research. We believe that we have found certain definite causes for the diversity of results, and that we shall be

Time.	Rate of pulse.	Height of pulse.	
22′ 10″			
22 15	.....	...	Inject 0.004 gm. digitalin.
23 0			
23 20	.....	...	Inject 4 mg. digitalin.
24 0–15	.....	...	Inject 4 mg. digitalin.
25 0			
25 15	.....	...	Inject 4 mg. digitalin.
25 35	105	22	
25 40–55	.....	...	Inject 4 mg. digitalin.
26 25	72	24–32	Long diastole pauses (Fig. 9).
26 40	.....	...	Heart stops for twenty seconds.
27 20	10	52	(Fig. 9.)
28 0	.....	...	0.005 gm. atropine sulphate without effect.
34 0	.....	...	Heart stops in diastole; responds to irritation.

FIG. 9.



Time 25′-30″. 1 — + = injection of 0.004 gm. digitalin.
Animal had previously received 0.026 gm. digitalin.

TABLE XIII.—Bock's Method. Digitalin. Dog, weight 9.6 kilos.

Time.	Rate of pulse.	Height of pulse.	
Beginning	102	30–40	
0′ 10″	.....	...	Inject 0.004 gm. digitalin.
1 30	.....	...	Inject 0.004 gm. digitalin.
2 30	84	46–64	
3 30	.....	...	Inject 0.004 gm. digitalin.
5 0			
7 20	.....	...	Inject 0.016 gm. digitalin in four doses.
8 0	72	36–54	Experiment ended.

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